



DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, DC 20380-0001

MCO 5210.13C
ARDB
22 Aug 1988

MARINE CORPS ORDER 5210.13C W/CH 1

From: Commandant of the Marine Corps
To: Distribution List

Subj: MARINE CORPS MICROFORM MANAGEMENT PROGRAM

Ref: (a) SECNAVINST 5210.12C (NOTAL)
(b) MCO 5210.11D
(c) MCO P5233.1
(d) MCO P5231.1A (NOTAL)
(e) MCO 5210.12F (NOTAL)
(f) MCO P5600.31F

Encl (1) Guidance for Developing and Analyzing Non-ADP
Microform Systems and Requirements
(2) Basic Microforms Approved for Marine Corps Use
(3) Funding Guidance
(4) Glossary
(5) Format for Requesting a New Non-ADP Microform
Information System
(6) Format for Requesting New or Additional Non-ADP
Equipment for an Approved Microform Information
System
* (7) Format to Request Conventional Non-ADP Microform
Services

1. Purpose. To set forth the policy, objectives, and responsibilities for the Marine Corps Microform Management Program and to publish standards applicable to microform systems and equipment.

2. Cancellation. MCO 5210.13B.

3. Authority. The Secretary of the Navy has identified microform management as an element of the Records Management Program and has directed, through reference (a), implementation of a microform program within the Department of the Navy (DON). In compliance, the CMC has implemented a subordinate program to guide the Marine Corps use of microforms.

* 4. Policy. Microforms will be used whenever they can contribute to the effectiveness of an organization. Decisions to convert records to microform, to acquire micrographics equipment to support microform system(s), to request microform services, must be justified.

5. Background. There is a continuing emphasis on the need to improve methods of storing, controlling, and distributing information throughout the Department of Defense (DoD). Although microfilm has traditionally been considered a medium for storing large quantities of inactive records, the general use of microforms has expanded into complete and active information systems. As a result of technological improvement in computer-output-microfilm (COM), computer-assisted-retrieval (CAR), and source document micrographics, well-designed microform systems now offer a dynamic, cost-effective medium for improving methods of recording, storing, and distributing vast amounts of data.

6. Goals and Objectives

a. The overall goals of the Marine Corps Microform Management Program are to guide and coordinate microform requirements and applications by ensuring the cost-effective use of microforms. To achieve these goals, specific objectives include:

- (1) Reducing costs.
- (2) Resolving paperwork problems.
- (3) Developing user-oriented systems.
- (4) Improving equipment utilization.
- (5) Providing information, guidance, and assistance.

b. To accomplish these objectives, the Marine Corps Microform Management Program will:

- (1) Provide guidance for the analysis, design, evaluation, and implementation of microform systems throughout the Marine Corps.
- (2) Publish standards, monitor systems development, and ensure that Marine Corps microform systems are compatible within the Marine Corps and with other DoD microform products and systems.
- (3) Ensure that the quality of microforms produced meet Marine Corps as well as National Archives standards.

7. Responsibilities

a. The CMC (ARDB) is the central reference point for all matters involving micrographics and is responsible for administering the Marine Corps Microform Management Program. These responsibilities include the following:

(1) Developing and issuing detailed instructions for administering the program.

(2) Evaluating requests for microform systems, equipment and services to ensure that the development of new or substantially redesigned systems are supported by justification which warrants the cost of the system over its life cycle.

(3) Coordinating with other DoD agencies to ensure that Marine Corps microform systems are compatible, to the maximum extent possible, with those of other agencies.

(4) Coordinating with the CMC (ARD/ARG/LFS/MPRO) for identification of funds to support all non-ADP associated microform equipment or services.

(5) Providing microform equipment recommendations to activities in the supporting establishment and the operating forces via the CMC (L).

(6) Coordinating with the CMC (ARE) for printing and publication management activities for those microform systems determined to be micropublishing systems.

(7) Coordinating with the CMC (ARDB) when microfilming temporary and permanent records.

b. The CMC (CCI) maintains cognizance over the development and implementation of microform systems internal to the ADP environment and is responsible for the following:

(1) Coordinating the funding for ADP-associated microform equipment.

(2) Directing the establishment of Regional Microform Centers to provide micrographic support to all Marine Corps activities on a geographic basis, where feasible.

(3) Providing the CMC (ARDB) with a copy of each approved ADP-associated microform system request.

(4) Ensuring that requests for systems that produce permanent records on microfilm with no paper original (e.g., COM), are staffed to the CMC (ARDB) prior to approval.

c. Marine Corps commanders are responsible for the supervision and execution of the Marine Corps Microform Management Program within their commands.

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(1) Major supporting establishment commanders will assign responsibility for COM systems to the Marine Corps Central Design and Programming Activity (MCCDPA), Regional Automated Support Center (RASC), Information Systems Management Office (ISMO), or an appropriate organization; the responsibility for non-ADP microform systems will be assigned to the appropriate staff offices.

(2) All other commanders will ensure that the provisions of this Order and reference (b) are adhered to in the development of local microform programs.

8. Records Management. Records microfilmed will be managed per reference (b).

9. COM. The COM systems which utilize automatic data processing equipment resources will be developed and justified per references (c) and (d).

10. Technical Data Repositories. Microform systems that are concerned only with engineering drawing/data are governed by reference (e).

11. Micropublishing. Micrographic devices used for micropublishing systems will be acquired and managed per reference (f).

12. Action

a. Commanders and HQMC staff agencies anticipating requirements for microform systems and/or equipment will utilize the guidelines in enclosures (1) through (4) to evaluate their requirements. Submit requests to the CMC (ARDB) per formats prescribed in enclosures (5) and (6).

* b. HQMC staff agencies will submit requests for non-ADP microform services per format prescribed in enclosure (7).

c. Records Disposition. Requests for new or additional non-ADP microform systems/equipment/services to include all related background data accumulated during the various planning phases.

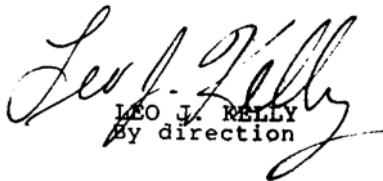
(1) Approved Requests

Retention Period: Permanent. Transfer to the Washington National Records Center, Washington, DC 20409, or a designated Federal records center 7 years after date system/equipment/services has been determined operational. (Note: If system/equipment was upgraded during the 7-year period, retain onboard for 7 years from date upgrade became operational.)

(2) Disapproved Requests

Retention Period: Destroy 2 years after request has been disapproved.

13. Reserve Applicability. This Order is applicable to the Marine Corps Reserve.


LEO J. KELLY
By direction

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HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, DC 20380-0001

MCO 5210.13C Ch 1
ARDB
27 Nov 89

MARINE CORPS ORDER 5210.13C Ch 1

From: Commandant of the Marine Corps
To: Distribution List

Subj: MARINE CORPS MICROFORM MANAGEMENT PROGRAM

Encl: (1) New page inserts to MCO 5210.13C

1. Purpose. To transmit new page inserts to the basic Order.
2. Cancellation. HQO 5210.8B.
3. Action
 - a. Remove the letterhead page and pages 2, 3, 4, and 5; replace with corresponding pages in the enclosure.
 - b. Insert new page enclosure (7) in the basic Order.
 - c. Wherever the organizational code "HQSP-5" appears, change to read "ARDB" throughout.
4. Change Notation. Paragraphs denoted by an asterisk (*) symbol contain changes not previously published
5. Filing Instructions. File this Change transmittal immediately behind the signature page of the basic Order.


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GUIDANCE FOR DEVELOPING AND ANALYZING
NON-ADP MICROFORM SYSTEMS AND REQUIREMENTS

1. The potential applications and advantages to be derived from microforms are limited only by the imagination and creativeness of the system designer. Microforms are particularly useful in an information system because they can be either information carriers or an information storage medium. The overriding factor in the design of a microform system is that it must be user-oriented. Other major considerations are:

a. The system design should incorporate sufficient flexibility to take advantage of the rapidly expanding technological improvements in equipment and techniques.

b. Systems developed unilaterally should be compatible with other systems developed throughout the Marine Corps, to the maximum extent possible, to facilitate exchange of information, and to minimize equipment support requirements.

c. Microform must be in the formats prescribed in enclosure (2).

d. Microform viewers must contain dual-lenses, 24X and 46X. Individual mechanized retrieval (keyboard) viewers are inherently more expensive than standard viewers and must be cost justified for each individual application.

e. Microform viewer/printers must conform to MIL-V-80241B (dual-lenses, 24X and 48X). Additionally, a viewer/printer must be an essential system component. Its use must be supported by extensive, detailed justification, to include specific plans for local control. The capability to produce copies using plain bond paper should be considered when selecting printers.

f. When permanent records are microfilmed, a silver halide master (or duplicate) plus one copy (silver halide, diazo, or vesicular) are required by the National Archives and Record Service (NARA). These copies will be verified for completeness and accuracy, and transferred to the Washington National Records Center, 4205 Suitland Road, Suitland, MD 20409, or an approved Federal records center. Include the name of the organization, title of records, number or identifier for each unit of film, security classification, inclusive dates/names or other data identifying the records as a unit of film, and certification by an official that the microforms were produced in the normal course of the activity's operations and that care has been taken to ensure that the microforms are a complete and accurate copy of

ENCLOSURE (1)

the original. Detailed instructions for transferring records to Federal records centers are contained in MCO 5210.11. The original paper documents of permanent microfilmed records may not be destroyed without the approval of the CMC (ARDB).

g. The master film of permanent record microforms and records microfilmed to dispose of the original record will be inspected every 2 years during the scheduled life. The inspection shall be made using a 1 percent randomly selected sample in the following categories:

- (1) 70 percent - microforms not previously tested;
- (2) 20 percent - microforms tested in the last inspection; and
- (3) 10 percent - control groups.

h. The control group shall represent samples of microforms from the oldest microforms filmed through the most recent. Results of inspections will be retained for a period of 6 years after completion. Reports of inspections shall be provided the CMC (ARDB) upon request.

- (1) Quantity of microform onhand; i.e., number of rolls and number of microfiche.
- (2) Quantity of microforms inspected.
- (3) Condition of microforms.
- (4) Defects discovered.
- (5) Corrective actions taken.

i. The original (master) copy of the microform will not be used for reference purposes. Negative polarity (clear characters and numbers on a dark background) duplicate copies of the original microform will be used for distribution and reference purposes.

2. Justification of a proposed microform system is generally dependent on the conversion of system benefits into cost reductions. Benefits that can be expected to occur from the development of microform systems are tangible and intangible. Although cost data must generally be derived from tangible factors that can be quantified, the greatest benefits of microform systems are often the intangible factors of better file integrity and increased efficiency to be expected from the availability of more timely and easily used information.

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New microform systems, or major changes to existing systems, generally satisfy the following requirements:

- a. Increase efficiency and speed the processing of inquiries.
 - b. Be flexible enough to expand to meet operational growth.
 - c. Provide complete, accurate information on demand.
3. Those who design microform systems should have a workable understanding of film formats, camera capabilities, film processing and duplication techniques, distribution patterns, viewing and printing equipment, and other technical aspects of a microform system. Systems should be designed to achieve the following:
- a. Reduce cost.
 - b. Reduce file maintenance and filing errors.
 - c. Reduce record retrieval time.
 - d. Provide file integrity.
 - e. Be easily operated.
4. During the design of microform systems, commercial vendors may be contacted to obtain up-to-date information on the capabilities, limitations, and cost of equipment. A commitment to purchase equipment will not be made or implied prior to system approval by the CMC (ARDB).
5. For technical assistance in the development and operation of microform systems, contact the CMC (ARDB), commercial (202) 694-1482 or AUTOVON 224-1482.
6. Appendix A provides guidance for planning a microform system, and appendix B provides guidance for the required cost/benefit analysis.

ENCLOSURE (1)

PLANNING A NON-ADP MICROFORM SYSTEM - FIVE PERFORMANCE PHASES

1. PHASE I: Analytical Study. Data collection and functional analysis are conducted to establish the system objectives/alternatives, prior to the formulation of specific hardware and software requirements. File utilization, storage, maintenance, disposition, and conversion factors should be examined in detail. Submit a copy of this analysis in the request for the system.

2. PHASE II: System Design. Feasibility evaluations and cost-performance/trade-off analysis should be employed to optimize system selection. The major variable attributes to be considered during phase II are:

a. Equipment Variables

- (1) Equipment identification and functions.
- (2) Capability per unit.
- (3) Utilities required by equipment (i.e., electricity, drainage, vents, etc.).
- (4) Purchase and rental costs.
- (5) Consumable costs.
- (6) Compatibility requirements.

b. Manpower Variables

- (1) Desired operator efficiency rates.
- (2) Training required to achieve desired operator efficiency rates.

c. Information Variables

- (1) Total number of records in the systems.
- (2) Frequency of inputs and updates.
- (3) Frequency of retrievals.
- (4) Retrieval time required by user.
- (5) Required number of users.
- (6) Operation schedules.

3. PHASE III: System Specifications. Detailed system specifications for equipment, processes, and other applicable factors such as software, logic, and facility requirements should be created during this phase of the system design. Consideration should be given to the planning, training, documentation, and system support operations necessary to complete and maintain the proposed design. Every effort should be made to use procedures in existing systems.

4. PHASE IV: System Implementation

a. The hardware acquisition and implementation phases are concerned with the transformation of the completed system design into software, hardware, and procedural documentation. Conversion of the file to microform is a major element in this phase and should be given very careful and detailed attention. Actions which should be considered during file conversion are:

- (1) Programming.
- (2) File purge.
- (3) Indexing.
- (4) Inspection of microforms.
- (5) Correction of defective film.
- (6) Method of filing.

b. Hardware acquisition is based on equipment specifications developed in phase III and current procurement regulations. In recommending equipment for use in microform systems, consideration should be given to the capabilities of local vendors to provide maintenance service on a contractual basis, to preclude the requirement to train personnel to perform these functions.

5. PHASE V: System Test and Turnover. Ensure verification and validation of the system to provide for a smooth transition to personnel who will operate and use the system. Turnover and transition training are an integral part of this phase to ensure complete integration of the microform system into the operations of the organization.

Appendix A to
ENCLOSURE (1)

COST/BENEFITS OF MICROFORM SYSTEM

1. In planning microform systems, a preliminary cost analysis, presenting the cost/benefits of the new system in relation to the old system will be prepared and submitted as part of the microform system proposal, and will consider the following costs for both the proposed and existing system:

a. One-Time Costs

- (1) Microform production equipment.
- (2) User equipment (readers/printers).
- (3) Preparation of microform production facility.
- (4) Initial file preparation and conversion (if applicable).

b. Recurring Costs (Annual)

- (1) Maintenance of equipment (production equipment and user equipment).
- (2) Consumables
 - (a) Film (master film and duplicating film).
 - (b) Chemicals (for processing film and for readers/printers).
 - (c) Paper (for reader-printer).

c. Labor Costs. Identify number and grade of each person required to operate the microform production facility, by function:

- (1) Equipment operators.
- (2) Other essential tasks.

d. Mailing Costs. (If an information dissemination system.)

- (1) Preparation of microforms for mailing (identify special techniques or devices to be used).
- (2) Postal rates.
- (3) Envelopes (or mailing containers).

Appendix B to
ENCLOSURE (1)

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e. Other. Identify other costs that may be unique to the proposed system.

2. In determining the economic feasibility of a microform system, equipment may be amortized over a period of 7 years. If a longer period of amortization is considered necessary, a justification for the longer period must be provided in the economic analysis.

Appendix B to
ENCLOSURE (1)

BASIC MICROFORMS APPROVED FOR MARINE CORPS USE

MICROFORM: Microfiche
SIZE: 105mm by 148mm
REDUCTION RATIO: 24X
FORMAT: 14 columns by 7 rows, comic mode
FRAMES: 98 per fiche
USES: Original source documents

MICROFORM: Microfiche
SIZE: 105mm by 148mm
REDUCTION RATIO: 48X
FORMAT: 18 columns by 15 rows, cine mode
FRAMES: 270 per fiche
USES: COM

MICROFORM: Microfiche, Jackets
SIZE: 4 by 6 inches, with 16mm strips
REDUCTION RATIO: 24X
FORMAT: 14 frames by 5 channels, comic mode
FRAMES: 70
USES: Active files that must be updated

ENCLOSURE (2)

MICROFORM: Microfiche, transparent
electrophotography (TEP)

SIZE: 105mm by 148mm

REDUCTION RATIO: Nominal 27X

FORMAT: 14 columns by 7 rows, comic mode

FRAMES: 98 per fiche

USES: Active files that must be updated

MICROFORM: Roll Microfilm

SIZE: 16mm

REDUCTION RATIO: 24X

FORMAT: Simplex, comic mode

FRAMES: 2400 per roll (approximately)

USES: Large volume sequentially
numbered documents -
reference material

MICROFORM: Roll Microfilm

SIZE: 35mm

REDUCTION RATIO: Nominal 24X

FORMAT: Varies

FRAMES: Varies

USES: Large documents such as maps,
engineering drawings, newspapers,
etc.

ENCLOSURE (2)

<u>MICROFORM</u> :	Aperture Cards
<u>SIZE</u> :	Standard EAM card with 35mm film
<u>REDUCTION RATIO</u> :	Varies
<u>FORMAT</u> :	Standard
<u>FRAMES</u> :	One
<u>USES</u> :	Engineering drawings, contract specification diagrams

ENCLOSURE (2)

REPORTS THAT MAY BE SUBMITTED
TO HQMC IN MICROFORM FORMAT

1. Microfilm/microfiche reports may be submitted to HQMC in lieu of computer printouts or other conventional (hard-copy) reports, provided:

a. A functional manager at Headquarters Marine Corps has authorized, by directive, submission of the report(s) in microform format.

b. Prior permission is obtained from the CMC (FD) for those reports pertaining to fiscal/accounting matters.

2. The following microforms are acceptable for use:

a. COM. May be used in lieu of computer-printout reports. Microform must be 105mm by 148mm in size, with images reduced at a 48:1 ratio.

b. Conventional Microfiche. May be used in lieu of standard typewritten (hard-copy) reports. Microform must be 105mm by 148mm in size, with images reduced at least 27:1 or 24:1 ratio. Format is 7 rows by 14 columns.

c. Microfilm Jackets. May be used in lieu of standard typewritten (hard-copy) reports. Jackets must be 4 by 6 inches in size, with images reduced at a 27:1 or 24:1 ratio, on 16mm strips. Format is 5 rows by 14 columns.

d. Film Type. Reports may be submitted on silver halide (original) film, diazo film, or vesicular (thermal) film. If reports are "permanent records," the provisions of paragraph 1f of enclosure (1) to this Order must be adhered to.

e. Certification of Microfiche Reports. Certification of reports, when required, may be accomplished in either of the following ways:

(1) Cover Letter. A cover letter signed by the certifying officer, may be submitted with the microfiche report. The letter should be stapled or otherwise attached to the paper envelope containing the microfiche.

Appendix A to
ENCLOSURE (2)

(2) Signature on Film

(a) On COM, the rows "N" and "O" of the original (silver halide) microfiche shall be left blank. After the film is processed, the blank rows shall be covered with a 1/2-by-5-inch piece of transparent tape, NSN: 7510-00-551-9821. The certifying officer shall then sign on the tape on the original microfiche only. Vesicular or diazo copies of the signed original microfiche may then be submitted.

(b) On conventional microfiche and microfilm jackets, certification may be accomplished by signing the last page of the hard-copy report before microfilming.

3. The following is a partial listing of paper publications currently produced in microfilm format:

Communications-Tactical
(COMTAC) Publications

Stock List SL-1-3 (USMC)

Department of Defense Activity
Address Directive (DODAAD)

COMSEC Material System
(CMS) Publications

Automated Communications Operating
Requirements (COR's) Documentation

4. Viewers to support these applications may be obtained through the Defense General Supply Center (RICS9G), DSA, Richmond, VA.

Appendix A to
ENCLOSURE (2)

FUNDING GUIDANCE

MICROFORM <u>EQUIPMENT</u>	CATEGORY <u>I</u>	CATEGORY <u>II</u>	CATEGORY <u>III</u>
COM Recorder	*		*
COM Tape Drive	*		*
CAR Information System	*		*
Step and Repeat Camera		*	
Planetary Camera		*	
Roll-to-Roll Duplicator	*	*	
Rotary Camera	*	*	
Processor	*	*	
Individual Fiche Duplicator	*	*	
Fiche Cutter	*	*	
Quality Control Equipment	*	*	
Peripheral Photographic Equipment	*	*	
Viewing Equipment	*	*	

- Category I - May be funded with O&MMC or PMC funds, or as part of the ADP procurement budget, when purchased as part of an ADP system.
- Category II - May be funded as class 3 personal capital plant equipment, expense or investment-type items, as applicable per current budgetary instructions contained in MCO P7100.8. See also MCO 4200.9 for guidance on the acquisition and control of classes 3 and 4 plant property (station property).
- Category III - May be funded with Marine Corps Productivity Enhancing Capital Investment (PECI) Program funds. PEGI provides funding for the purchase of equipment or facilities that increase productivity and improves job performance. See MCO's 5220.10 and 5220.11 for guidance on the submission of project proposals.

ENCLOSURE (3)

GLOSSARY

1. Aperture Card. A standard electronic accounting machine (EAM) card on which has been mounted one or more microimages. Aperture cards containing single 35mm microimages are common in technical and engineering drawing applications.
2. Archival Quality (Archival Standards). The degree to which a processed print or film will retain its characteristics during a period of storage. The ability to resist deterioration for a specified length of time.
3. Bond Paper. Multiuse white paper for reader-printers (preferred over more expensive chemically treated paper).
4. Cameras. There are three basic types:
 - (1) Planetary. Produces microfilm from multisize documents. Must be manually fed and operated. Produces highest quality film at low production speed.
 - (2) Rotary. Produces microfilm from same-size documents mechanically passed beneath the lens. Compromises quality to obtain higher production speeds.
 - (3) Step and Repeat. Produces microfiche from multisize documents. Programmed to place images on the microfiche in a predetermined grid pattern. Must be manually fed and operated. Produces highest quality fiche at low production speed.
5. Computer-Output-Microfilm (COM). Microfilm containing data produced by a recorder from computer-generated electrical signals. Also called a recorder, it converts computer data into human readable language, and outputs it on microfilm or microfiche.
6. Computer-Assisted-Retrieval (CAR). The capability to have micrographic images located or identified by commands initiated through a computer terminal.
7. Densitometer. A device used to measure the optical density of an image or base by measuring the amount of incident light reflected or transmitted.
8. Diazo Film. A film on which the image is photographed; and on which, the images are then developed by a dry ammonia vapor process.
9. Document. A paper or group of papers which results in a single manual filing action, and which for microfilm purposes may result in one or more images.

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10. Dry Silver Film. A nongelatin silver film developed by the application of heat.
11. Dry Silver Process (Hard Copy). In a reader-printer, a heat developing process for producing paper prints the size of the original document from microimages. Copies produced by this process emerge from the printer completely dry.
12. Duplicator. A device used to make single or multiple copies of a microform from a master.
13. Electrophotographic Process (Hard Copy). In a reader-printer, an electrostatic process for producing paper prints the size of the original document from microimages. Copies produced by this process emerge from the printer completely dry.
14. Electrostatic Film. A film on which the image is transferred by a photoelectrical process; and on which, the image can then be developed by either a liquid or a dry process.
15. Enlarger-Printer. A reader-printer which can produce paper copies of microimages larger than the original document.
16. Generation. A measure of remoteness of a particular copy from the original material. The picture taken from a document is termed first generation microfilm. Copies made from the first generation are the second generation, etc.
17. Jacket. A 4- by 6-inch transparent plastic carrier with multiple channels or sleeves holding 16mm in flat strips. Usually, a total of 70 microimages can be mounted in a single jacket. This microform is suitable for unitized records that must be updated.
18. Master File/Film. The file containing the original film, or master records, from which distribution copies are made.
19. Microfiche. A sheet of microfilm containing multiple-microimages in a grid pattern.
20. Microfilm. Any roll form of film containing microimages.
21. Microform. A generic term for any form, either film or paper, which contains microimages.
22. Microform System. Equipment and procedures for the production, reproduction, maintenance, storage, retrieval, display, or use of microforms. A system may involve one or more of the functions listed above.
23. Micrographics. The science, art, and technology of document and information miniaturization and associated microform systems.

24. Microimage. A unit of information, such as a page of text or a drawing, too small to be read without magnification.
25. Standards NMA. Microfilm standards established by the National Micrographics Association.
26. Polarity. A term when used in micrographic technology indicates the dark to light relationship of an image on a microform. A negative polarity microform has clear characters (images) on a dark background, and a positive polarity microform has dark characters on a clear background.
27. Processor. A device that uses liquid chemistry to develop the image on film.
28. Recorder. The component of a COM unit which converts stored information to a visible image on a cathode-ray tube, and which simultaneously photographs it.
29. Reduction. Expressed in two ways: (1) The number of times a document has been reduced from its original size; e.g., 24X (24 times); or (2) the ratio of the linear measurements of the original document size to the size of the microimage; e.g., 24:1 or 48:1.
30. Satellite File. A supplemental or duplicate file containing copies of the microrecords maintained in the master file.
31. Silver Halide Film. A high resolution silver grain emulsion film designed to meet archival standards.
32. Transparent-Electrophotography (TEP). Refers to a process by which individual microimages are xerographically placed on microfiche.
33. Thermoplastic Film. A film on which the image is formed or fused by a heat process; and on which, an image may be erased or replaced by reheating.
34. Updatable Film. A film on which it is possible to repeatedly add an image or several images without affecting any already processed frames.
35. Vesicular Film. A film on which the image is photographed; and on which, the image is then developed by application of heat.
36. Viewer. An optical device used for reading the information contained on a microform.
37. Viewer-Printer. A viewer which can produce paper copy the size of the original document from microforms.

ENCLOSURE (4)

FORMAT FOR REQUESTING
A NEW NON-ADP MICROFORM INFORMATION SYSTEM

From:

To: CMC (ARDB)

Subj: Request for Approval of Non-ADP Microform System Equipment
for (Identify System)

Ref: (a) MCO 5210.13C

1. Per the reference, it is requested that a microform system be approved for (identify unit that will utilize system/equipment; include title, functional location, and telephone number (commercial/AUTOVON). State the office of record having primary responsibility for maintaining the records.

2. Describe present system/equipment that will be replaced and provide the following:

a. Give title of records series and complete description of each records series in detail. Briefly explain the purpose and the use made of the records. Submit representative sample (filled in) of records series/reports/forms.

b. State whether the records are permanent or temporary. Cite the records disposal authority from the records disposal manual (field activities use SECNAVINST P5212.5B/C; HQMC staff agencies use HQO P5212.3E). If records are not covered by retention standards, field activities comply with paragraph 4, part 1, chapter 2 of SECNAVINST P5212.5C; HQMC staff agencies comply with chapter 1, paragraph 1003.2b of HQO P5212.3E.

c. Inclusive dates of records and security classification.

d. Physical characteristics (paper, microform, etc.)

e. If paper records, indicate condition (good, torn, faded, etc.), color (if other than white), and size (largest, smallest).

ENCLOSURE (5)

f. Volume of records (quantify by providing an estimated number of single pages, cubic feet, etc.). In the absence of an exact page count, volume may be computed by using the following as approximate measurements:

(1) One letter-size file cabinet drawer equals approximately 1.25 cubic feet (approximately 4,000 pages).

(2) One legal-size file cabinet drawer equals approximately 1.6 cubic feet (approximately 4,000 pages).

(3) One lineal foot equals approximately 2,280 pages (190 documents equal 1 inch).

g. Estimate the percentage of single sheets of paper included in paragraph 2 above, that have data entered on both sides.

h. Rate of accumulation.

i. Describe present method of (1) updating, (2) indexing, and (3) filing.

j. Estimate of updates of other changes during a specified sample time period.

k. Describe method of retrieving and furnishing information and show number of such actions during a sample period.

l. Estimate percentage of searches that require copies of documents to be made and method of copying.

m. Identify typical users (excluding the "Office of Record") of information. State how long the users maintain the records and describe their method of disposing of copies of these records.

n. List types and number of personnel employed in maintaining system; i.e., time spent in (1) filing, (2) updating, (3) indexing, (4) retrieving, and (5) copying.

o. List space and equipment required for the present operation.

3. Describe the proposed system/equipment for which approval is being requested. (If information requested in specific subparagraphs below is not applicable, so indicate.)

a. Describe proposed medium to be utilized (aperture card, magnetic tape, microfiche, roll film, video tape, etc.); include microform size and reduction ratios to be used.

ENCLOSURE (5)

b. Explain procedures for converting files and implementing the system.

c. Describe any changes that will result from conversion to the proposed system and relate these changes to information provided in paragraph 2 above.

4. List each item of equipment required for the proposed system, furnish complete descriptive nomenclature, reasons for selecting that particular equipment, unit cost, annual maintenance cost (per unit), and total equipment and maintenance cost.

a. Indicate whether rental or purchase is contemplated, the rental cost of each item, and the justification for such selection.

b. Itemize supplies and costs contemplated to implement proposed system and estimate annual requirements.

c. Specify difference (if any) in space requirements under the proposed system.

d. Summarize any contemplated savings in funds, space, personnel, and any expected increase in efficiency that will result from the proposed system.

e. State the proposed source of funds necessary to cover cost of the system/equipment.

5. Include a preliminary cost analysis, see appendix B to enclosure (1). Requests for replacement equipment for a previously approved system need not include the above information. The development of large sophisticated microform systems, potentially requiring large expenditures of funds, should be coordinated with the CMC (ARDB) while still in the conceptual stage in order to permit more detailed economic analysis.

6. Provide name of project officer for this application, include office, and telephone number (commercial/AUTOVON).

(Signature)

ENCLOSURE (5)

FORMAT FOR REQUESTING NEW OR ADDITIONAL NON-ADP
EQUIPMENT FOR AN APPROVED MICROFORM INFORMATION SYSTEM

From:

To: CMC (ARDB)

Subj: Request for Microform Equipment

Ref: (a) MCO 5210.13C

1. Per the reference, it is requested that the following equipment be approved for the (identify system) microform system:

Equipment:

Manufacturers:

Model:

Unit Cost:

2. The above equipment will be used to (replace/supplement) equipment which is being used in the microform system approved by the CMC on (indicated date and letter reference).

3. The following equipment was considered and evaluated, in addition to the equipment listed in paragraph 1: (include a brief narrative which discusses other equipments and the reasons they were rejected).

4. Funding for the requested equipment will come from (indicate funding source).

5. The project officer for this application is (indicate name, office, and telephone number (commercial/AUTOVON)).

(Signature)

ENCLOSURE (6)

FORMAT TO REQUEST CONVENTIONAL NON-ADP
MICROFORM SERVICES

From: (HQMC Staff Agency)
To: DirAR (ARDB)

Subj: REQUEST FOR CONVENTIONAL NON-ADP MICROFORM SERVICES

Ref: (a) PHONCON/Meeting _____/ARDB on _____

1. Per the reference, the following information is provided:

a. Date and Title of Records to be filmed: _____

b. Location of Records to be filmed: Staff agency, code,
room number (include a brief summary of the office functions).
functions).

c. Type: Temporary/permanent; original/copies; disposal
authority _____ (cite current disposal instructions).

d. Volume: Inches: _____

Size: _____ (8 1/2" x 11"; 11" x 14",
computer printout,
etc.)

e. Number of required copies of the project: _____

f. Project POC: (Name, title, phone number, room
number)

ENCLOSURE (7)
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